RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)									DATE February 1999			
APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATU									URE			
RDT&E, Defense Wide/BA 4	RDT&E, Defense Wide/BA 4							Humanitarian Demining				
l P							PE 0603920D8Z					
COST(In Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost		
Total Program Element (PE) Cost	0	18.498	15.847	14.819	18.480	14.921	15.234	15.554	Continuing	Continuing		
Humanitarian Demining/P920t	0	18.498	15.847	14.819	18.480	14.921	15.234	15.554	Continuing	Continuing		

- (U) A. Mission Description and Budget Item Justification
- (U) <u>BRIEF DESCRIPTION OF ELEMENT</u>
- (U) BRIEF DESCRIPTION OF ELEMENTS:
- This Humanitarian Demining R&D program element focuses on the testing, demonstration and validation of equipment suitable for **(U)** immediate use in various international humanitarian demining missions and environments. The goal is to provide the equipment to the international demining community so that they may assess the equipment's capabilities in actual demining conditions. This program focuses on R&D technology development that reduces the time and cost associated with demining while improving the overall safety of the operator. This is accomplished through the adaptation of commercial-off-the-shelf equipment, the integration of mature technologies and the leveraging from past and current R&D project activity in U.S. and foreign countermine, as well as civilian unexploded ordnance clearance mission areas. The primary objectives this program aims to achieve in technological development are to improve existing mine detection technologies, overcome the heavy vegetation problems in specific environments and provide improved protection for deminers. These areas of emphasis have been adopted as a direct result of the feedback received at the Humanitarian Demining Workshop held January 20-22, 1998 and the Washington Conference on Global Demining held May 20-22, 1998. A corollary benefit form this program is that many of the technologies pursued have very high potential for satisfying requirements in other DoD mission areas, such as military area clearance. Additional technologies identified in these workshops will also be addressed. These include technologies that: detect individual mines/minefields; detect explosives in buried mines (biosensors); confirm the presence of mines (verification); mark and map mines/minefields; improve current wide area survey equipment; clear large areas faster and more efficiently with improved mechanical clearance equipment; improve post clearance QA equipment; train deminers in mine awareness, and improve deminer hand tools.

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APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
RDT&E, Defense Wide/BA 4	Humanitarian Demining	
	PE 0603920D8Z	

COST(In Millions)	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to	Total Cost
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Total Program Element (PE) Cost	0	18.498	15.847	14.819	18.480	14.921	15.234	15.554	Continuing	Continuing
Humanitarian Demining/P920t	0	18.498	15.847	14.819	18.480	14.921	15.234	15.554	Continuing	Continuing

(U) Project Number and Title: P920t Humanitarian Demining

(U) PROGRAM ACCOMPLISHMENTS AND PLANS

(U) FY1999 Plans:

(U) This program aims to initiate and/or continue development and demonstration of demining technologies while maintaining focus on the three primary areas of emphasis that include: improving current mine detection technologies, overcoming heavy vegetation problems in specific environments and providing improved protection for deminers. These primary areas of focus were defined by the various non-governmental organizations (NGOs) present at the Humanitian Demining Workshop held in January 1998 and the various donor governments, international organizations and NGOs that participated in the May 1998 Washington Conference on Global Demining. This program will also continue development of: large mechanical clearing devices for agricultural areas and QA operations; new alternatives for in-situ neutralization devices that are simple to use, affordable and expendable; simple, safe, robust and affordable technologies for detecting, discriminating and identifying landmines; and mine/minefield marking and mapping systems. A new area of development will be in improved large area survey equipment used for demining mission planning. Finally, the program will continue to concentrate on operational fielding of mature technologies suitable for demining.(\$ 18.498 Million)

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(U) **FY2000 Plans:**

(U) Complete development and demonstrations on the improvements of existing mine detection technologies to include detection to a depth of 27cm and a publication containing a "Consumer Report" type approach for outlining the results of the R&D findings on currently available and near term detection technologies. Complete development and demonstration of vegetation clearing devices and improved in-situ neutralization devices. Continue to develop and demonstrate improved protective equipment for deminer protection and comfort by focusing on the human factor issues in mine protective gear. Continue to leverage existing technology from the tactical countermine area to develop and demonstrate detection technologies used for discrimination and verification. Continue to develop mechanical clearance equipment suitable for large area reduction and QA operations. Continue to develop mine/minefield marking and mapping systems and large area survey equipment. Continue to develop and demonstrate mine awareness and training technologies to help the deminers in future priority countries.(\$ 15.847 Million)

(U) FY2001 Plans:

(U) Continue to leverage existing technology from the tactical countermine area to develop and demonstrate detection technologies used for discrimination and verification. Continue to develop mechanical clearance equipment suitable for large area reduction and QA operations. Continue to develop mine/minefield marking and mapping systems and large area survey equipment. Continue to develop and demonstrate mine awareness and training technologies to help the deminers in future priority countries.(\$ 14.819 Million)

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RDT&E, Defense Wide/BA 4	Humanitarian Deminir	ng
	PE 0603920D8Z	

(U) B. Program Change Summary	<u>FY1998</u>	<u>FY1999</u>	FY2000	FY2001	Total Cost
Previous Presidents Budget	0	17.234	16.113	15.086	Continuing
Appropriated Value	0	0	0	0	Continuing
Adjustments to Appropriated Value					
a. Congressionally Directed Undistributed Reduction	0	0	0	0	
b. Rescission/Below-threshold Reprogramming, Inflation Adjustment	0	0	0266	267	
c. Other	0	1.264	0	0	
Current Presidents Budget	0	18.498	15.847	14.819	Continuing

Change Summary Explanation: Funding changes are due to congressional undistributed reductions and inflation adjustments.

- (U) <u>Funding:</u> No funds were appropriated for this line in FY 1998. FY 1999 through FY 2003 program reflects a realignment of funding from PE 0603120D.
- (U) Schedule: N/A
- (U) <u>Technical:</u> No funds were appropriated for this line in FY 1998. FY 1999 through FY 2003 program reflects a realignment of funding from PE 0603120D.
- (U) C. OTHER PROGRAM FUNDING SUMMARY COST: N/A
- (U) **D.** ACQUISITION STRATEGY: N/A
- (U) E. <u>SCHEDULE PROFILE:</u> N/A

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RDT&E BUDGET ELEMENT/PROJEC	CT COST BREAK	KDOWN (R-3 E	DA	те: February 1999			
APPROPRIATION/BUDGET ACTIVITY:							
RDT&E, Defense Wide / BA 4		Humanitarian Demining PE 0603920D					
A. Project Cost Breakdown (\$ in thousands)	FY 1998	FY 1999	FY 2000	FY 200)1		
Project Cost Categories:							
Cost Categories							
a. Demonstrations & Validation	0	17.523	14.813	13.69	1		
b. Program Management Support	0	.975	1.034	1.12	8		
TOTAL	0	18.498	15.847	14.81	9		
B. Budget Acquisition History and Planning Information:							
Funding Revisions							
FY 1998 President's Budget	0	0	9.944	9.93	5		
FY 1999 President's Budget	0	17.234	16.113	15.08	6		
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No Funds were appropriated for this line in FY 1998. FY 1999 through FY 2001 reflect a realignment of funding from PE 0603120D. The current FY 1999 reflects a Congressional adjustment of \$1.5 million. The FY 2000 and FY 2001 amounts reflect inflation adjustments.

Performing Organizations:

Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity/EAC	Project Office EAC	Total Prior to FY 1998	Budget FY 1998	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total <u>Program</u>
Miscellaneous					0	0	18.498	15.847	14.819	Continuing	Continuing
TOTAL PROJECT					0	0	18.498	15.847	14.819	Continuing	Continuing